



STUDY GUIDE

FOURTH YEAR COURSE

Department of Pathology King Edward Medical University,
Lahore

DEPARTMENT OF PATHOLOGY

VISION

To be a center of excellence in pathological sciences and medical research, delivering high-quality medical education and fostering innovation in alignment with the standards of the Pakistan Medical and Dental Council, while contributing to the development of competent healthcare professionals.

MISSION

To provide integrated, competency-based, clinically relevant, and research-oriented pathological education through modern teaching methodologies; to foster critical thinking and professionalism; and to prepare competent healthcare professionals who serve society with excellence, ethics, and innovation.

MESSAGE OF HEAD OF DEPARTMENT

Dear Students,

Welcome to the 3rd year & 4th year of your medical education. This study guide has been developed to support and streamline your learning process. It is intended to provide clear guidance regarding the course objectives, organization of content and the expected learning outcomes. The curriculum is designed to foster not only sound knowledge of pathology but also essential clinical correlations, practical skills, and professional attitudes required of a competent medical graduate.

This year reflects our commitment to academic excellence, professional integrity and holistic medical development. I encourage you to engage actively, think critically, and take ownership of your learning. The foundation you build now will shape your future as competent, compassionate, and responsible physicians.

Pathology remains the structural foundation of your basic & clinical sciences training, forming the conceptual framework upon which all future clinical learning is built. A sound understanding of human pathology macroscopic, microscopic, and radiological is essential for safe practice, accurate diagnosis, and professional competence. Our department is dedicated to ensuring that your knowledge of pathology is rigorous, clinically contextualized, and aligned with contemporary standards.

Remember that your success will be built on a foundation of consistent effort, a questioning mind, and a commitment to academic integrity. We remain committed to supporting your growth in both knowledge and character.

We hope that your academic journey in the Department of Pathology will be intellectually rewarding, professionally enriching, and will equip you with the essential competencies required for your future clinical practice.

Prof. Dr. Faiza Bashir
Chairperson, Pathology Department
King Edward Medical University, Lahore

FACULTY LIST OF PATHOLOGY STAFF

Sr. No.	Name	Designation
28.	Prof. Dr. Falza Bashir	Chairperson
29.	Prof. Dr. Ambareen Hamid	Professor of Pathology
30.	Prof. Dr. Mizna Arif	Professor of Pathology
31.	Dr. Samreen Hameed	Associate Professor
32.	Dr. Hina Bukhair	Associate Professor
33.	Dr. Samina Qamar	Associate Professor
34.	Dr. Safeena Sarfraz	Assistant Professor
35.	Dr. Muna Malik	Assistant Professor
36.	Dr. Sindhu Rehman	Assistant Professor
37.	Dr. Rukhsana Tumrani	Assistant Professor
38.	Dr. Maryam Zahid	APWMO
39.	Dr. Huma Sheikh	Demonstrator
40.	Dr. Rafeeda Maab	Demonstrator
41.	Dr. Rabia Altaf	Demonstrator
42.	Dr. Sarah Iqbal Ch.	Demonstrator
43.	Dr. Shahzad Ahmad	Demonstrator
44.	Dr. Asad Ahmad Shabbir	Demonstrator
45.	Dr. Anum Rouf	Demonstrator
46.	Dr. Qurrat-ul-Ain	Demonstrator
47.	Dr. Khadija Iqbal	Demonstrator
48.	Miss. Hiba	Lecturer

TABLE OF CONTENTS

Topic	PAGE
Introduction to study guide	3
Objectives of the curriculum	4
Curriculum map	5
Structure of 4 th Year MBBS	6
Assessment	7
Break Up of Lectures	8-9
Icon	10
Learning Resources	11
Modules Pathology 4 th Year MBBS	12-13

INTRODUCTION TO STUDY GUIDE

Dear student,

Welcome to the 3rd and 4th year Pathology Course. The department of Pathology will be facilitating the course. You will have 130 lectures in 3rd year and 134 lectures in 4th year, learning the different aspects of the subject.

The purpose of the study guide is to help you learn the subject of Pathology. It is designed to help you manage your learning and access the resources available to you. It takes you through the general objectives of learning the subject, divides the subject into modules for easy learning and helps you understand the course work, practical skills and attitudes that are desired of a good doctor.

The basic sciences courses you did in the last two years are pre-requisites for the course of Pathology and will help you in better understanding of the subject and its application to actual patients. We advise you to refer back to these subjects if there are any issues in understanding the subject. We hope you will realize how integrated these subjects are to your clinical practice.

Methods of assessment, have also been written so that you can relate teaching to assessment and have a fair idea of the assessment methods and what internal and external assessment is all about.

We hope the students take time out to go through the guide and to use it effectively to learn the subject of Pathology. We look forward to feed back from the students and faculty so that the guide can be improved further.

For any assistance please do not hesitate to contact the teaching faculty of the department of Pathology. Alternatively, please feel free to visit the head of the department for any issues that you face in learning of the subject or otherwise.

We hope that your rotation in our department will be very fruitful and enjoyable and will equip you for future practical life.

With compliments from:

Head of department and members of faculty, Department of Pathology.

OBJECTIVES OF CURRICULUM

General objectives of under graduate Pathology teaching and training are to equip the students with essential knowledge, so that they are able to:

- Understand and compare different diseases on the basis of their etiology, risk factors, incidence and clinical features.
- Understand pathogenesis of a disease.
- Make a differential diagnosis on the basis of clinical, morphological features and lab parameters.
- Stage and grade malignant pathologies.
- Make practical observation of morphological features (gross and microscopic) of a given disease
- Appreciate the role of multiple medical disciplines and importance of multidisciplinary coordination in making final diagnosis and patient management.

KEMU Curricular Map: A Competency-Based Framework

4TH YEAR MBBS Modular Integrated Framework

Period	Modules	Horizontal Integration	Skill component	Vertical Integration
January to March	Haematology (02-01-2025 to 03-02-2025) CVS (03-02-2025 to 15-02-2025) 1 st Intermodule (17-02-2025 to 01-03-2025) Respiratory (17-03-2025 to 14-04-2025)	Pathology Community Medicine Eye ENT Interactive Lecture SDL <u>VENUE:</u> Maqbool Ahmad Block	<ul style="list-style-type: none"> • Practical • Tutorial • Clinical ward/ Rotation 	Medicine, Surgery, paeds Anesthesia Chest Medicine Neurology Behaviour Sciences Interactive Lecture SDL <u>VENUE:</u> Maqbool Ahmad Block
Assessment written component (MCQ's & SEQ's)				
April to June	GIT & Hepatobiliary (04-04-2025 to 10-04-2025) Male & Female Genital Tract (12-05-2025 to 24-05-2025) Kidney (26-05-2025 to 07-06-2025) 2 nd Intermodule (07-06-2025 to 10-07-2025) CNS (19-07-2025 to 21-07-2025)	Pathology Community Medicine Eye ENT Interactive Lecture SDL <u>VENUE:</u> Maqbool Ahmad Block	<ul style="list-style-type: none"> • Practical • Tutorial • Clinical ward/ Rotation 	Medicine, Surgery, paeds Anesthesia Radiology Oncology Psychiatry Neurology Interactive Lecture SDL <u>VENUE:</u> Maqbool Ahmad Block
Assessment written component (MCQ's & SEQ's)				
July to October	3 rd intermodule (28-07-2025 to 09-08-2025) Musculoskeletal System (11-08-2025 to 30-08-2025) 4 th intermodule (01-09-2025 to 20-09-2025) Recall/ Revision (22-09-2025 to 22-10-2025)	Pathology Community Medicine Eye ENT Interactive Lecture SDL <u>VENUE:</u> Maqbool Ahmad Block	<ul style="list-style-type: none"> • Practical • Tutorial • Clinical ward/ Rotation 	Medicine, Surgery, paeds Anesthesia Radiology Oncology Psychiatry Neurology Orthopedics Behaviour Sciences Interactive Lecture SDL <u>VENUE:</u> Maqbool Ahmad Block
Assessment written component (MCQ's & SEQ's)				
November Preparation Leave four weeks				
December: Summative Assessment-Written Component + Structured Practical & Viva				

STRUCTURE OF 4TH YEAR

- There will be a total 134 lectures in 4th year
 - 130 lectures are for interactive teaching
- 4 to 5 will be utilized for formative written assessment: Class Tests in the form of MCQs
- Collective feedback along with results are provided during lectures after Class Tests
- Send ups are scheduled at the end of fourth year around 45 days before final professional.

ASSESSMENT

Formative Assessment

Sr.#	Assessment	Tools	Frequency
1.	Class Tests	30 MCQs 3 SEQs	1 Test after every 2 Modules
2.	Send Ups (Written)	MCQs----- 30 SEQs-----10	After completion of session



4th Year MBBS Modules Session 2024-2025

MODULE	STARTING DATE	ENDING DATE	DURATION IN DAYS	CONTACT HOURS (Lecture, Practical Hospital stay)
Hematology	02-01-2025	03-02-2025	27	43
CVS (Blood vessels and heart)	03-02-2025	15-02-2026	10	33.75
1 st intel module	17-02-2025	01-03-2025	12	44
Endocrinology	03-03-2025	15-03-2025	12	44
Respiratory system	17-03-2025	12-04-2025	17	31.45
Gastrointestinal and Hepatobiliary	04-04-2025	10-04-2025	23	39.83
Male & Female Genital Tract	12-05-2025	24-05-2025	18	27.2
Kidney	26-05-2025	07-06-2025	8	16.8
2 nd Intel Module	07-06-2025	10-07-2025	12	44
CNS	19-07-2025	21-07-2025	6	22
3 rd Intel Module	28-07-2025	09-08-2025	12	44
Musculoskeletal System	11-08-2025	30-08-2025	18	44
4 th Intel Module	01-09-2025	20-09-2025	12	44.50
Recall/ revision	22-09-2025	22-10-2025	27	21.47



Distributions of Lectures-2024-2025

MODULE	Patho	C M	Eye	ENT	Gyna	Medicine	Surgery	Paed s Medi	Paed s Surg	Oncolo gy	Radiolo gy	Anae s	Miscellaneo us
Hematology	26	12	05	03	05	07	8	3	4	3	00	3	Chest Med-2 Neurology-2
CVS (Blood vessels and heart)	08	03	03	03	02	04	5	00	00	0	00	2	
1 st Intel module	00	14	12	10	00	00	00	00	00	00	00	00	
Endocrinology	09	01	05	00	02	10	3	00	00	00	1	1	Neurology-1 Neurosurg-1
Respiratory system	13	08	03	05	02	3	5	00	00	00	00	2	Chest Med-3 Beh scien-2 Neurology-2
Gastrointestinal and Hepatobiliary	18	13	00	00	03	11	12	3	3	2	2	1	Psychiatry-1
Male & Female Genital Tract	19	00	00	00	10	4	2	00	00	3	1	00	Urology-1
Kidney	14	00	00	00	08	8	00	1	00	1	1	1	Urology-7
2 nd Intel Module	00	12	10	05	00	00	00	00	00	00	00	00	
CNS	08	00	01	00	00	1	00	00	1	00	1	00	Neurology-7
3 rd Intel Module	00	04	10	11	00	00	00	00	00	00	00	00	
Musculoskeletal System	07	00	00	00	00	8	9	00	00	3	9	00	Ortho-10
4 th Intel Module	03	21	11	04	00	00	00	00	00	00	00	00	
Recall/revision	09	05	06	07	02	8	8	2	2	2	5	1	Urology-3 Ortho-2 Neurology-2 Psychiatry-5
Total	134	93	66	48	34	65	52	9	10	14	20	11	

ICONS

The following icons have been used to help you identify the various experiences you will be exposed to.



Learning objectives



Assessments



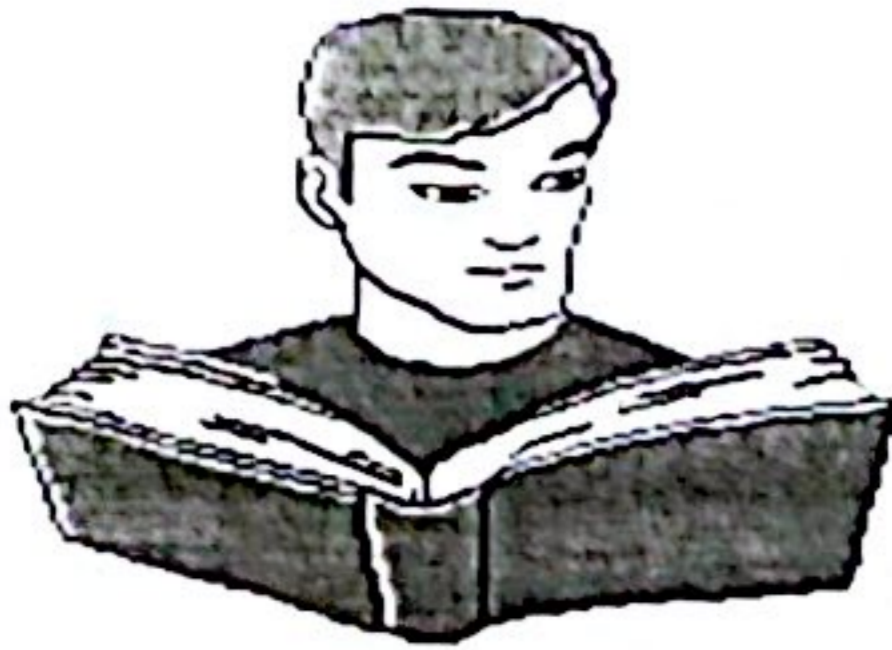
Learning Resources (Tutorials)



Independent learning from the Internet or (Digital Library)



Specific Learning Objectives



LEARNING RESOURCES

RECOMMENDED BOOKS:

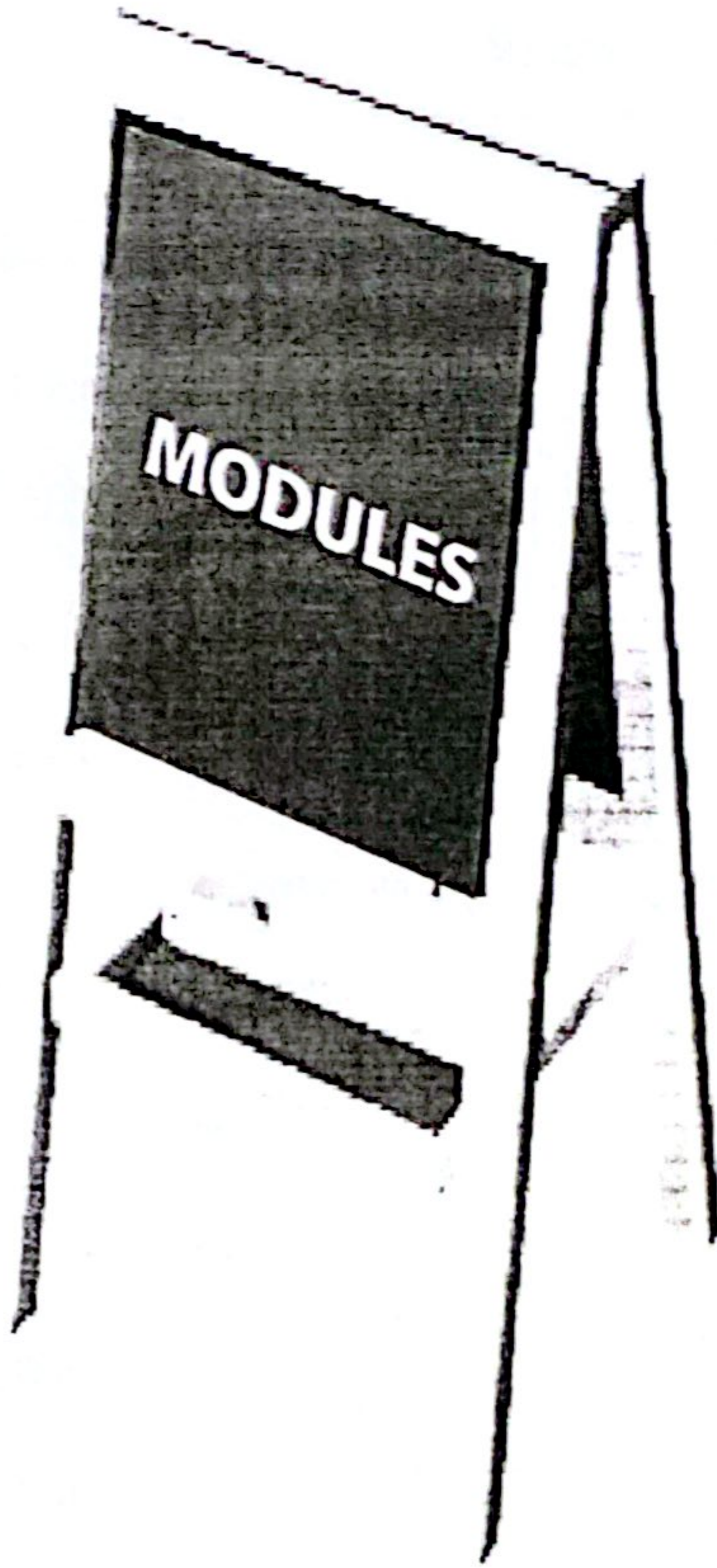
1. Robbins & Cotran Pathologic Basis of Disease (Latest Edition)
2. Monica Cheesbrough District Laboratory Practice in Tropical Countries Part I & II (Latest Edition)
3. Medical Microbiology & Immunology by Ernest Jawetz and Warren E. Levinson (Latest Edition)



Independent learning from the Internet



1. Web and Digital Library of KEMU



MODULES PATHOLOGY 4TH YEAR

S. No	Module
1.	CVS
2.	Haematology
3.	Respiration
4.	GIT
5.	Liver, Pancreas & Gall Bladder
6.	Female Genital System
7.	Male Genital System and lower Urinary Tract
8.	Kidney
9.	Endocrinology
10.	Bone, Joint & Soft tissue
11.	Breast
12.	Skin
13.	CNS
14.	1 st Intermodule
15.	2 nd Intermodule
16.	3 rd Intermodule
17.	4 th Intermodule